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September 9, 2020

UIC Branch (WU-16J)
US EPA region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Re: Class II Permit Application for Enhanced Recovery Well
Chessplay Project, Antrim County, MI
Burnett A3-18

Mr. Greenhagen,

Per your request, attached are revised wellbore schematics and P&A plan for the above referenced well. Corrections were necessary to eliminate confusion regarding construction of the well, mainly the absence of an open hole below the production casing. Since the Burnett A3-18 was originally constructed as a gas production well, it was perforated in the Antrim zone. Proposed CO₂ injection is intended in the perforated interval. There is no open hole below production casing; the space below the casing shoe is filled with cement. Plug back depth for the well is the same as the bottom of the production casing depth (1,275').

Revised wellbore schematics and P&A plan are replacing the originally submitted documents.

If there are any questions, please contact Ms. Natalie Schrader of my staff at 231-995-4076 or reach her at nschrader@riversideem.com

Sincerely,

Jim Schramski
James Schramski,
VP Operations

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

PLUGGING AND ABANDONMENT PLAN

WELL NAME & NUMBER, FIELD NAME, LEASE NAME & NUMBER

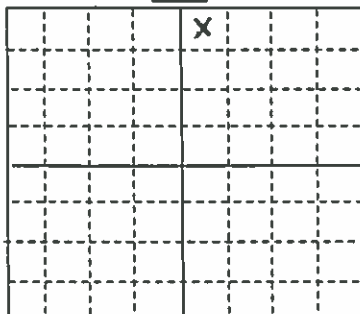
Burnett A3-18

NAME, ADDRESS, & PHONE NUMBER OF OWNER / OPERATOR

Riverside Energy Michigan, LLC.
10691 E. Carter Rd. Suite 201
Traverse City, MI 49684
231-995-4001

Locate Well and Outline Unit on
Section Plat - 640 Acres

N



STATE
MI

COUNTY
Antrim

STATE PERMIT NUMBER
Pending

SURFACE LOCATION DESCRIPTION

NW/NW/NE, Sec. 18, T30N-R6W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location 550 ft. From (N/S) NORTH Line of Quarter Section

And 24 1/4 ft. From (E/W) EAST Line of Quarter Section

TYPE OF AUTHORIZATION

- ☒ Individual Permit
☐ Rule
☐ Area Permit

Number of Wells in Area Permit : 1

US EPA Permit Number : Pending

**WELL
ACTIVITY**

- ☐ Class I
☐ Hazardous
☐ Nonhazardous
☒ Class II
☐ Brine Disposal
☐ Hydrocarbon Storage
☒ Enhanced Recovery
☐ Class III
☐ Class IV

CASING/TUBING/CEMENT RECORD AFTER PLUGGING AND ABANDONMENT

Size	WT (lb/ft) TBG/CSG	Original Amount (CSG)	CSG to be Left in Well	Hole Size	Sacks Cement Used	Type
13-3/8"	Conductor	62'	62'	Driven	Driven	-
8-5/8"	23#	715'	715'	12-1/4"	215 sks	unknown
5-1/2"	14#	1275'	1275'	7-7/8"	200 sks	unknown

**METHOD OF EMPLACEMENT
OF CEMENT PLUGS**

- ☐ Balance Method
☐ Dump Bailer Method
☐ Two Plug Method
☒ Other

CEMENT TO PLUG AND ABANDON DATA

	Plug # 1	Plug # 2	Plug # 3	Plug # 4	Plug # 5	Plug # 6	Plug # 7
Size of Hole or Pipe in Which Plug Will Be Placed (inches)	5-1/2"						
Calculated Top of Plug (ft.)	Surface						
Measured Top of Plug (ft.)	n/a						
Depth to Bottom of Plug (ft.)	922'						
Sacks of Cement to be Used	107						
Slurry Volume to be Used (cu. Ft.)	126						
Slurry Weight (lb./gal.)	15.6						
Type of Cement, Spacer or Other Material Used	Class A						
Type of Preflush Used							

DESCRIPTION OF PLUGGING PROCEDURE

MI Service Unit. TOH w/ packer & tubing. TIH w/ flow-thru retainer. Set retainer at 750'. TOH w/ tbg. Pump 20 sacks and drop wiper plug. Pump 87 sacks to surface. Cut csg 4' below ground level. Weld plate on sub. Restore location.

ESTIMATED COST OF PLUGGING AND ABANDONMENT

Cement	\$10,000	Cast Iron Bridge Plug	\$0
Logging	\$0	Cement Retainer	\$6,000
Rig or Pulling Unit	\$4,000	Miscellaneous	\$5,000
		Total	\$25,000

CERTIFICATION

I certify under the penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE

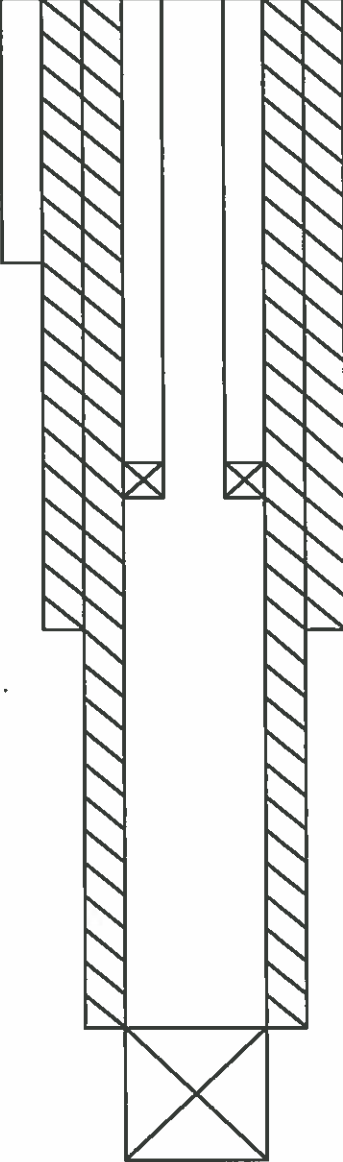
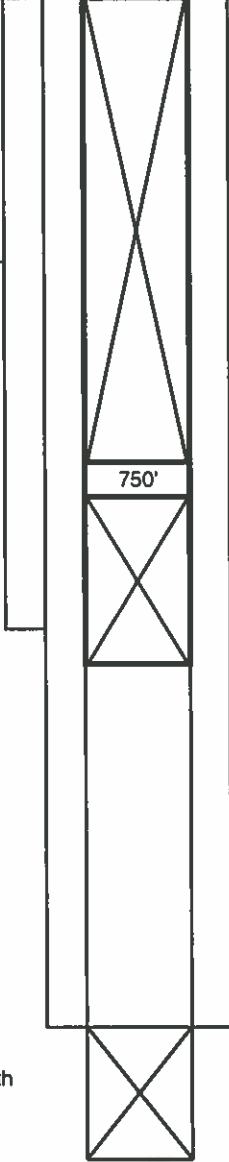
Jim Schramski, VP Operations

SIGNATURE

Jim Schramski

DATE SIGNED

09/09/20

ORIGINAL WELL CONSTRUCTION DURING OPERATION				PLUGGING AND ABANDONMENT CONSTRUCTION					
Burnett A3-18				Burnett A3-18					
Surface				Surface					
Top of cement surface			Surface Casing		Surface Casing				
215 sks			715'		715'				
			USDW Base		USDW Base				
			609'		609'				
Top of cement			Intermediate Csg.		Intermediate Csg.				
n/a			n/a		n/a				
			Tbg depth		Tbg depth				
Top of Cement Surf			730'		730'				
200 sks			Long String Csg.		Long String Csg.				
			1275'		1275'				
Perforations			* Depth		* Depth				
766' - 867'			1285'		1285'		1285'		
1285'					1285'				
** Add Any Additional Information									
* May not Apply									
LIST OF ALL OPEN AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED									
Specify Open Hole/ Perforations/ Varied Casing			From	To	Formation Name				
Perforations			766	867	Antrim Shale				

RIVERSIDE ENERGY MICHIGAN, LLC
BURNETT A3-18
CHESSPLAY

